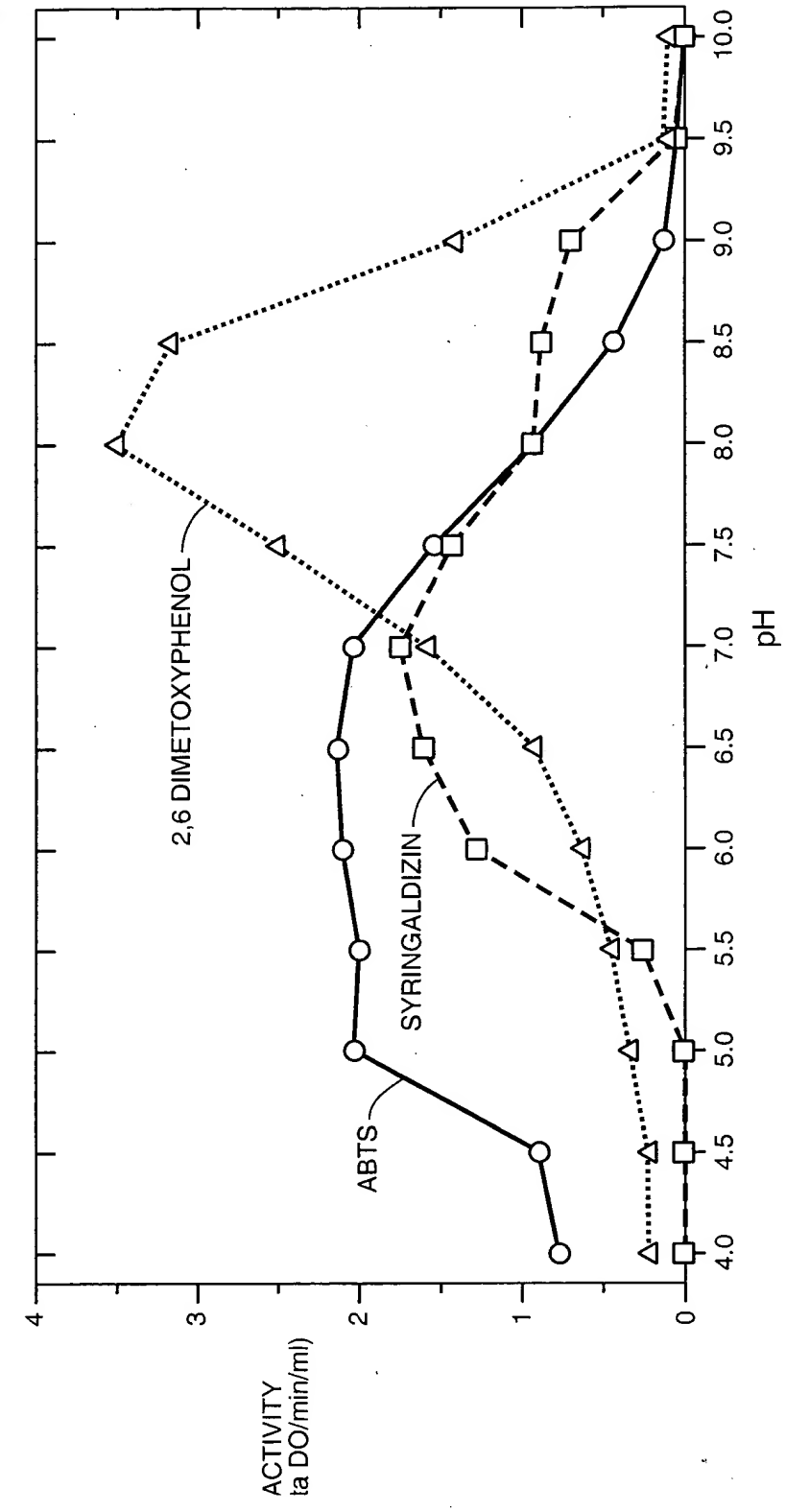

FIG._1

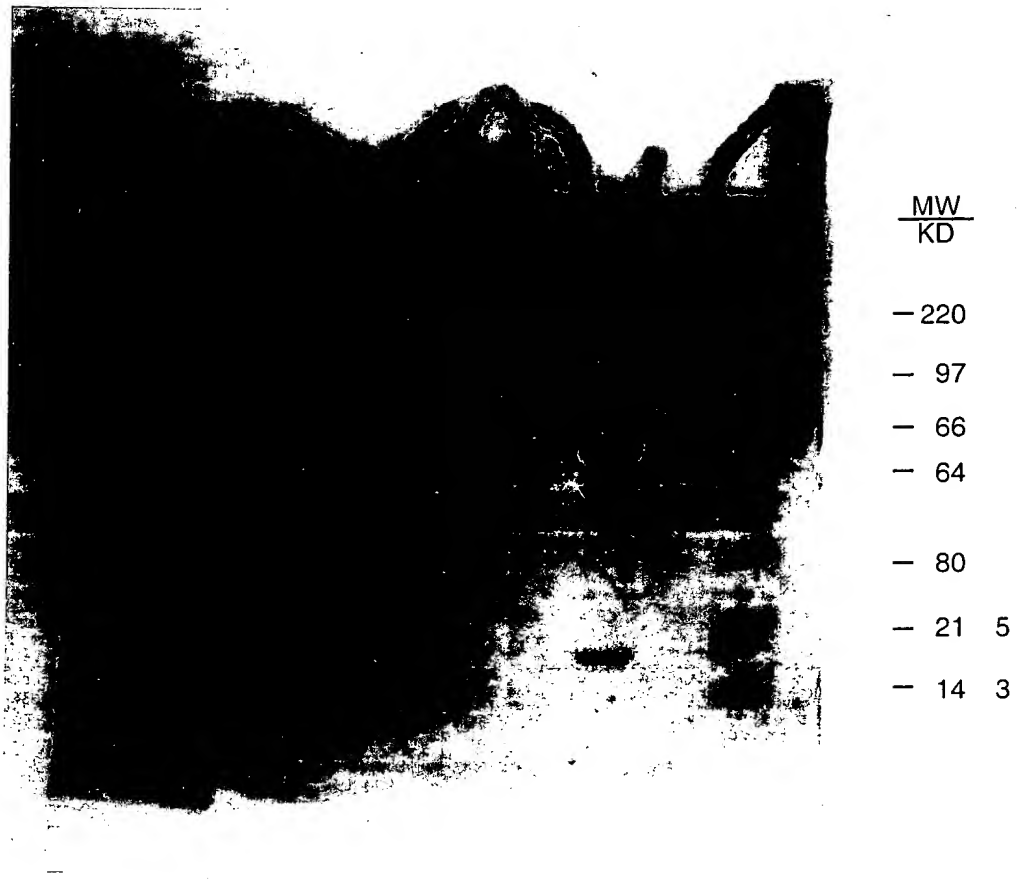

FIG._3

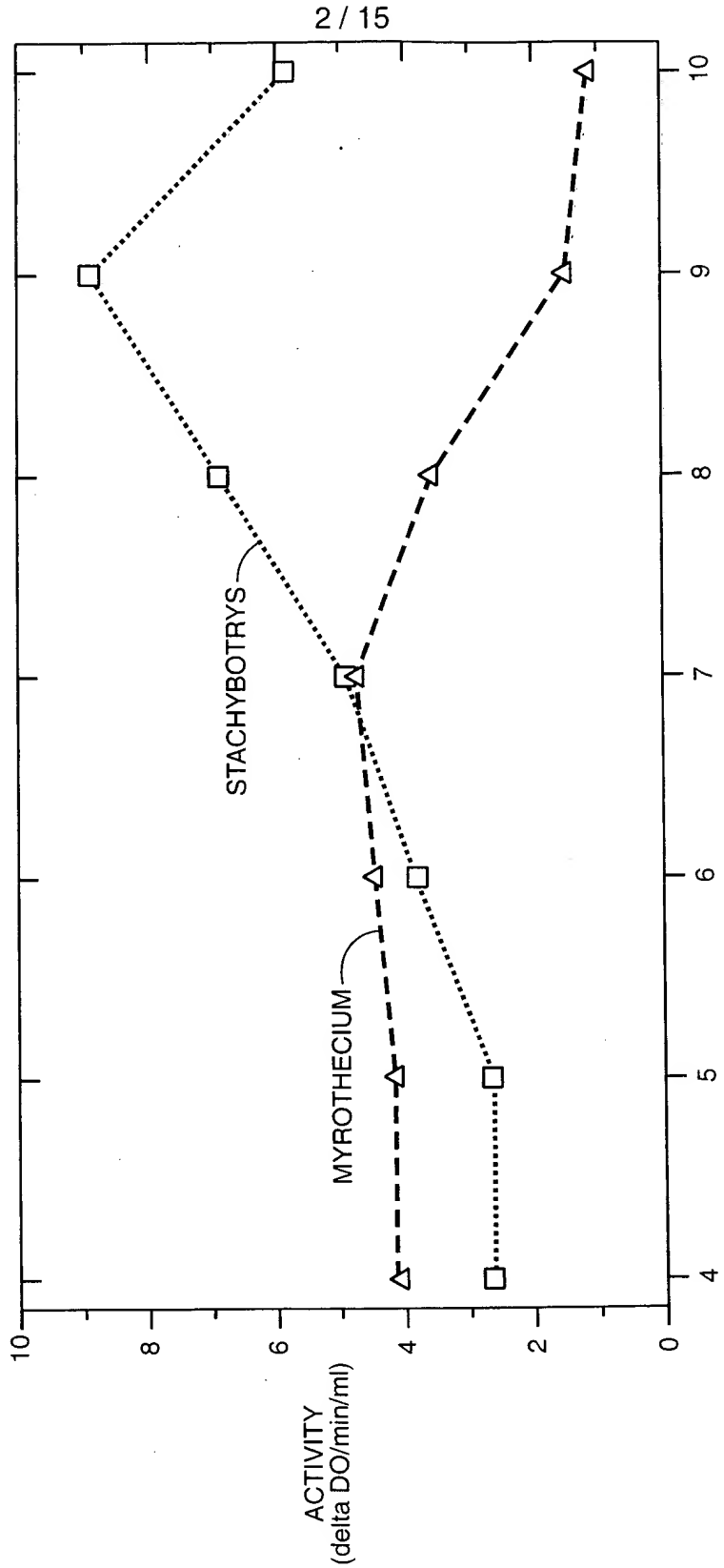
ACTIVITY
(delta DO/min/ml)
0
2
4
6
8
10
4
5
6
7
8
9
10
pH
STACHYBOTRYS
MYROTHECIUM

FIG._2

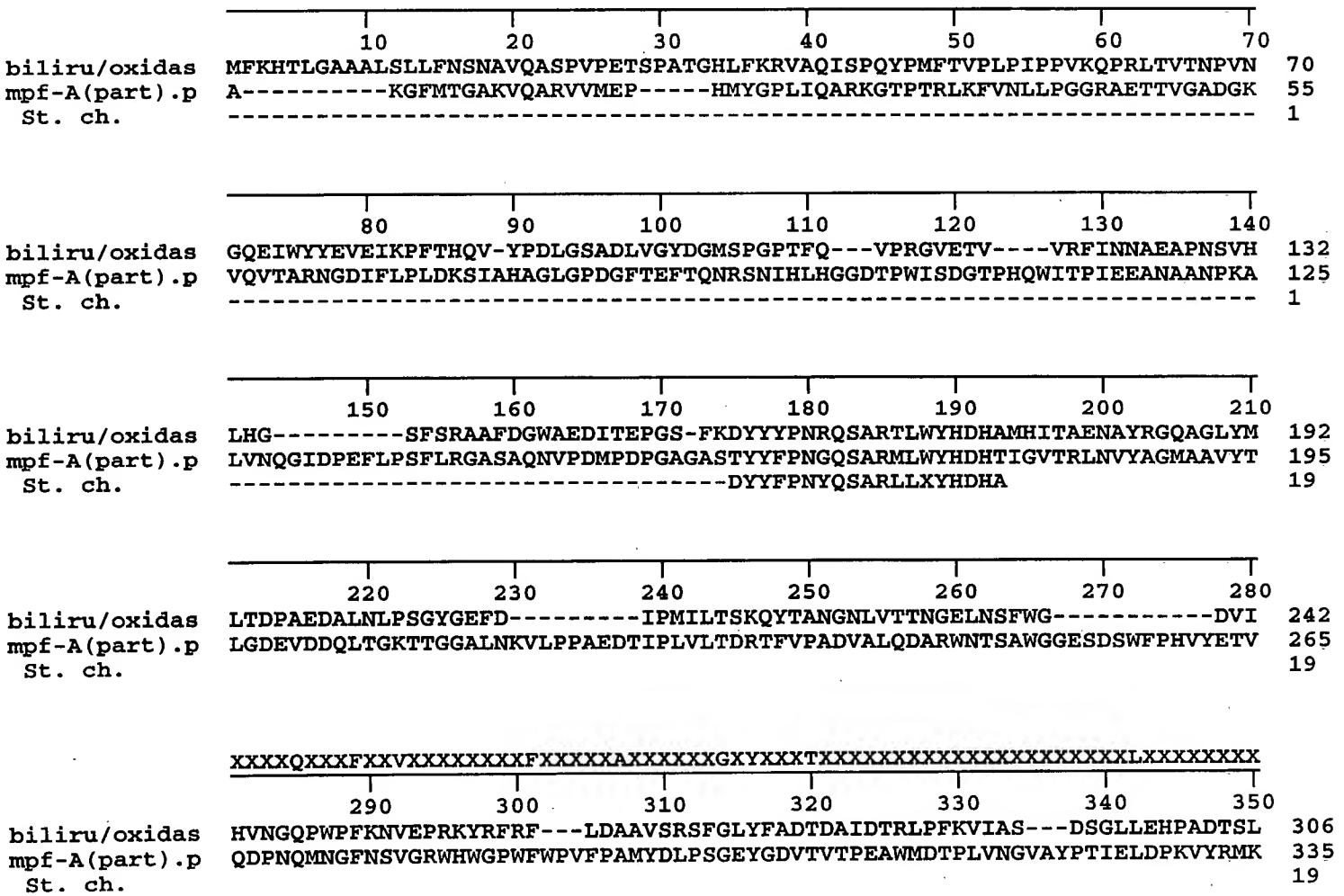
10 20 30 40 50 60 70
biliru/oxidas MFKHTLGAAALSLLFNSNAVQASPVPETSPATGHLFKRVAQISPQYPMFTVPLPIPPVKQPRLTVTNPVN 70
mpf-A(part).p A----------KGFMTGAKVQARVVMEP-----HMYGPLIQARKGTPTRLKFVNLLPGGRAETTVGADGK 55
St. ch. ---------- 1
80 90 100 110 120 130 140
biliru/oxidas GQEIWYYEVEIKPFTHQV-YPDLGSADLVGYDGMSPGPTFQ---VPRGVETV----VRFINNAEAPNSVH 132
mpf-A(part).p VQVTARNGDIFLPLDKSIAHAGLGPDGFTEFTQNRSNIHLHGGDTPWISDGTPHQWITPIEEANAANPKA 125
St. ch. ---------- 1
150 160 170 180 190 200 210
biliru/oxidas LHG---------SFSRAAFDGWAEDITEPGS-FKDYYYPNRQSARTLWYHDHAMHITAENAYRGQAGLYM 192
mpf-A(part).p LVNQGIDPEFLPSFLRGASAQNVPDMPDPGAGASTYYFPNGQSARMLWYHDHTIGVTRLNVYAGMAAVYT 195
St. ch. ----------DYYFPNYQSARLLXYHDHA 19
220 230 240 250 260 270 280
biliru/oxidas LTDPAEDALNLPSGYGEFD---------IPMILTSKQYTANGNLVTTNGELNSFWG----------DVI 242
mpf-A(part).p LGDEVDDQLTGKTTGGALNKVLPPAEDTIPLVLTDRTFVPADVALQDARWNTSAWGGESDSWFPHVYETV 265
St. ch. 19
XXXXQXXXFXXVXXXXXXXXFXXXXXAXXXXXXGXYXXXTXXXXXXXXXXXXXXXXXXXXXXLXXXXXXXX
290 300 310 320 330 340 350
biliru/oxidas HVNGQPWPFKNVEPRKYRFRF---LDAAVSRSFGLYFADTDAIDTRLPFKVIAS---DSGLLEHPADTSL 306
mpf-A(part).p QDPNQMNGFNSVGRWHWGPWFWPVFPAMYDLPSGEYGDVTVTPEAWMDTPLVNGVAYPTIELDPKVYRMK 335
St. ch. 19

FIG._4A

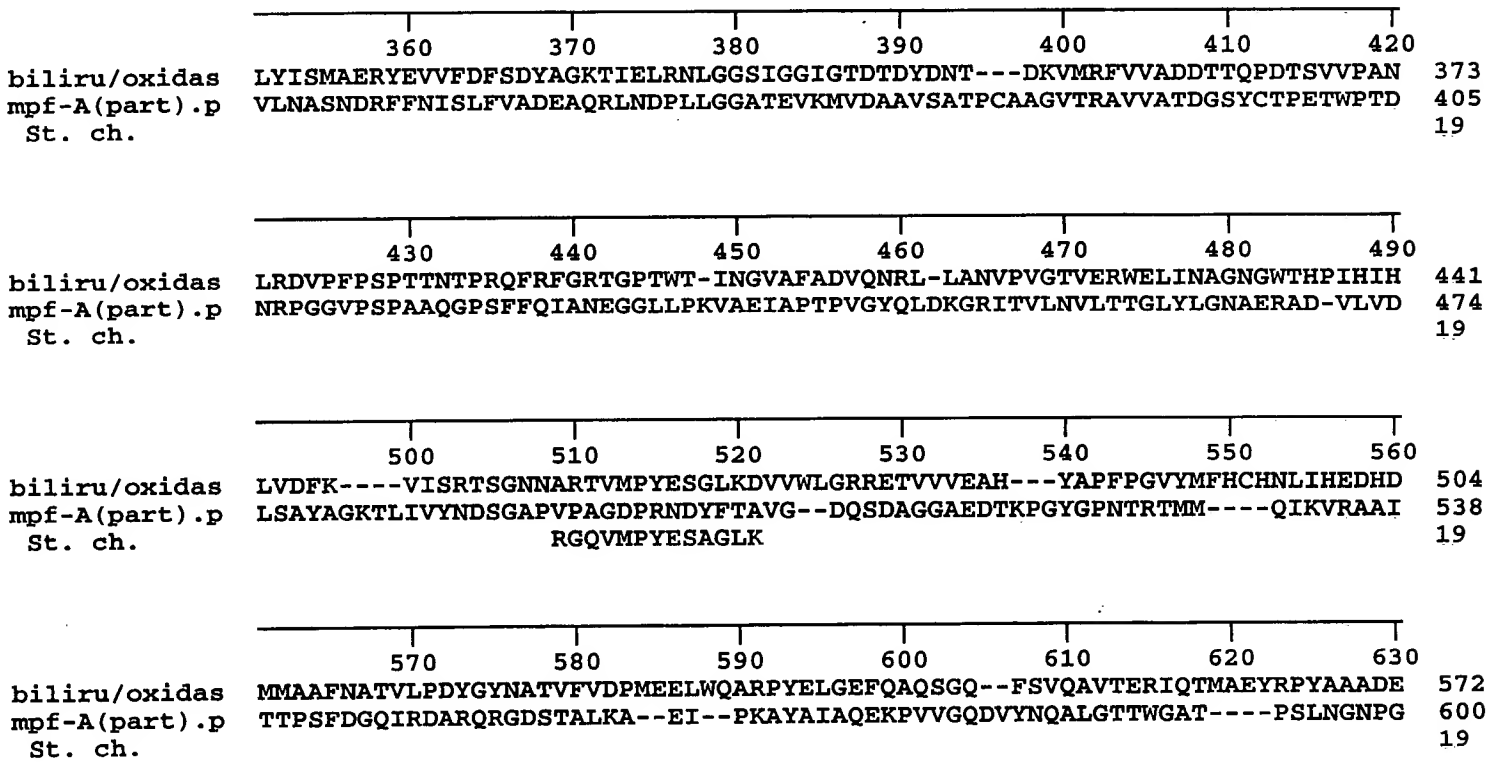
360 370 380 390 400 410 420
biliru/oxidas LYISMAERYEVVFDFSDYAGKTIELRNLGGSIGGIGTDTDYDNT---DKVMRFVVADDTTQPDTSVVPAN 373
mpf-A(part).p VLNASNDRFFNISLFVADEAQRLNDPLLGGATEVKMVDAAVSATPCAAGVTRAVVATDGSYCTPETWPTD 405
St. ch. 19
430 440 450 460 470 480 490
biliru/oxidas LRDVPFPSPTTNTPRQFRFGRTGPTWT-INGVAFADVQNRL-LANVPVGTVERWELINAGNGWTHPIHIH 441
mpf-A(part).p NRPGGVPSPAAQGPSFFQIANEGGLLPKVAEIAPTPVGYQLDKGRITVLNVLTTGLYLGNAERAD-VLVD 474
St. ch. 19
500 510 520 530 540 550 560
biliru/oxidas LVDFK----VISRTSGNNARTVMPYESGLKDVVWLGRRETVVVEAH---YAPFPGVYMFHCHNLIHEDHD 504
mpf-A(part).p LSAYAGKTLIVYNDSGAPVPAGDPRNDYFTAVG--DQSDAGGAEDTKPGYGPNTRTMM----QIKVRAAI 538
St. ch. RGQVMPYESAGLK 19
570 580 590 600 610 620 630
biliru/oxidas MMAAFNATVLPDYGYNATVFVDPMEELWQARPYELGEFQAQSGQ--FSVQAVTERIQTMAEYRPYAAADE 572
mpf-A(part).p TTPSFDGQIRDARQRGDSTALKA--EI--PKAYAIAQEKPVVGQDVYNQALGTTWGAT----PSLNGNPG 600
St. ch. 19

FIG._4B

```
GTCAATATGCTGTTCAAGTCATGGCAACTGGCAGCAGCCTCCGGGCTCCTGTCTGGAGTCCTCGGCATCCCGATGGACACCGGCAGCCAC   90
      M  L  F  K  S  W  Q  L  A  A  A  S  G  L  L  S  G  V  L  G  I  P  M  D  T  G  S  H    28

CCCATTGAGGCTGTTGATCCCGAAGTGAAGACTGAGGTCTTCGCTGACTCCCTCCTTGCTGCAGCAGGCGATGACGACTGGGAGTCACCT   180
 P  I  E  A  V  D  P  E  V  K  T  E  V  F  A  D  S  L  L  A  A  A  G  D  D  D  W  E  S  P    58

CCATACAACTTGCTTTACAGGAATGCCCTGCCAATTCCACCTGTCAAGCAGCCCAAGATGATCATTACCAACCCTGTCACCGGCAAGGAC   270
 P  Y  N  L  L  Y  R  N  A  L  P  I  P  P  V  K  Q  P  K  M  I  I  T  N  P  V  T  G  K  D    88

ATTTGGTACTATGAGATCGAGATCAAGCCATTTCAGCAAAGGATTTACCCCACCTTGCGCCCTGCCACTCTCGTCGGCTACGATGGCATG   360
 I  W  Y  Y  E  I  E  I  K  P  F  Q  Q  R  I  Y  P  T  L  R  P  A  T  L  V  G  Y  D  G  M    118

AGCCCTGGTCCTACTTTCAATGTTCCCAGAGGAACAGAGACTGTAGTTAGGTTCATCAACAATGCCACCGTGGAGAACTCGGTCCATCTG   450
 S  P  G  P  T  F  N  V  P  R  G  T  E  T  V  V  R  F  I  N  N  A  T  V  E  N  S  V  H  L    148

CACGGCTCCCCATCGCGTGCCCCTTTCGATGGTTGGGCTGAAGATGTGACCTTCCCTGGCGAGTACAAGGATTACTACTTTCCCAACTAC   540
 H  G  S  P  S  R  A  P  F  D  G  W  A  E  D  V  T  F  P  G  E  Y  K  D  Y  Y  F  P  N  Y    178

CAATCCGCCCGCCTTCTGTGGTACCATGACCACGCTTTCATGAAGACTGCTGAGAATGCCTACTTTGGTCAGGCTGGCGCCTACATTATC   630
 Q  S  A  R  L  L  W  Y  H  D  H  A  F  M  K  T  A  E  N  A  Y  F  G  Q  A  G  A  Y  I  I    208

AACGACGAGGCTGAGGATGCTCTCGGTCTTCCTAGTGGCTATGGCGAGTTCGATATCCCTCTGATCCTGACGGCCAAGTACTATAACGCC   720
 N  D  E  A  E  D  A  L  G  L  P  S  G  Y  G  E  F  D  I  P  L  I  L  T  A  K  Y  Y  N  A    238

GATGGTACCCTGCGTTCGACCGAGGGTGAGGACCAGGACCTGTGGGGAGATGTCATCCATGTCAACGGACAGCCATGGCCTTTCCTTAAC   810
 D  G  T  L  R  S  T  E  G  E  D  Q  D  L  W  G  D  V  I  H  V  N  G  Q  P  W  P  F  L  N    268

GTCCAGCCCCGCAAGTACCGTTTCCGATTCCTCAACGCTGCCGTGTCTCGTGCTTGGCTCCTCTACCTCGTCAGGACCAGCTCTCCCAAC   900
 V  Q  P  R  K  Y  R  F  R  F  L  N  A  A  V  S  R  A  W  L  L  Y  L  V  R  T  S  S  P  N    298

GTCAGAATTCCTTTCCAAGTCATTGCCTCTGATGCTGGTCTCCTTCAAGCCCCCGTTCAGACCTCTAACCTCTACCTTGCTGTTGCCGAG   990
 V  R  I  P  F  Q  V  I  A  S  D  A  G  L  L  Q  A  P  V  Q  T  S  N  L  Y  L  A  V  A  E    328

CGTTACGAGATCATTATTGACTTCACCAACTTTGCTGGCCAGACTCTTGACCTGCGCAACGTTGCTGAGACCAACGATGTCGGCGACGAG  1080
 R  Y  E  I  I  I  D  F  T  N  F  A  G  Q  T  L  D  L  R  N  V  A  E  T  N  D  V  G  D  E    358
```

FIG._5A

```
GATGAGTACGCTCGCACTCTCGAGGTGATGCGCTTCGTCGTCAGCTCTGGCACTGTTGAGGACAACAGCCAGGTCCCCTCCACTCTCCGT   1170
 D  E  Y  A  R  T  L  E  V  M  R  F  V  V  S  S  G  T  V  E  D  N  S  Q  V  P  S  T  L  R     388

GACGTTCCTTTCCCTCCTCACAAGGAAGGCCCCGCCGACAAGCACTTCAAGTTTGAACGCAGCAACGGACACTACCTGATCAACGATGTT   1260
 D  V  P  F  P  P  H  K  E  G  P  A  D  K  H  F  K  F  E  R  S  N  G  H  Y  L  I  N  D  V     418

GGCTTTGCCGATGTCAATGAGCGTGTCCTGGCCAAGCCCGAGCTCGGCACCGTTGAGGTCTGGGAGCTCGAGAACTCCTCTGGAGGCTGG   1350
 G  F  A  D  V  N  E  R  V  L  A  K  P  E  L  G  T  V  E  V  W  E  L  E  N  S  S  G  G  W     448

AGCCACCCCGTCCACATTCACCTTGTTGACTTCAAGATCCTCAAGCGAACTGGTGGTCGTGGCCAGGTCATGCCCTACGAGTCTGCTGGT   1440
 S  H  P  V  H  I  H  L  V  D  F  K  I  L  K  R  T  G  G  R  G  Q  V  M  P  Y  E  S  A  G     478

CTTAAGGATGTCGTCTGGTTGGGCAGGGGTGAGACCCTGACCATCGAGGCCCACTACCAACCCTGGACTGGAGCTTACATGTGGCACTGT   1530
 L  K  D  V  V  W  L  G  R  G  E  T  L  T  I  E  A  H  Y  Q  P  W  T  G  A  Y  M  W  H  C     508

CACAACCTCATTCACGAGGATAACGACATGATGGCTGTATTCAACGTCACCGCCATGGAGGAGAAGGGATATCTTCAGGAGGACTTCGAG   1620
 H  N  L  I  H  E  D  N  D  M  M  A  V  F  N  V  T  A  M  E  E  K  G  Y  L  Q  E  D  F  E     538

GACCCCATGAACCCCAAGTGGCGCGCCGTTCCTTACAACCGCAACGACTTCCATGCTCGCGCTGGAAACTTCTCCGCCGAGTCCATCACT   1710
 D  P  M  N  P  K  W  R  A  V  P  Y  N  R  N  D  F  H  A  R  A  G  N  F  S  A  E  S  I  T     568

GCCCGAGTGCAGGAGCTGGCCGAGCAGGAGCCGTACAACCGCCTCGATGAGATCCTGGAGGATCTTGGAATCGAGGAGTAA            1791
 A  R  V  Q  E  L  A  E  Q  E  P  Y  N  R  L  D  E  I  L  E  D  L  G  I  E  E               594
```

FIG._5B

CTGGCTAGCC TCACTTGGTA GACAGCCCTG ACAGCCTCAC TGGCTGGGGG TCGAAAGGCC AGTCAATATC TTGGTCACTG 80

CTAATAGTTC CTTGCTACGC GCAAAAAGCT CCTTGCCGAA GGGGCACAGA CTATCAAGTG AGACATATAG GATGCATGTC 160

TTTCATAGCC ACAGTTAGGG TGGTGACCTA CTCGAAGAGG CCCCGACTTG CATGCATACG ACATGTCGCT TCCATGCAAC 240

ATGTATGCGC ACATCGGCGA TCAGGCACCC TCTGCATGCA GAATAGAACC CCCCTGGTTT CCTTTTGTTT CTTTTCCTTT 320

CTCAACGACG CGTGAGCGTG GTTAACTTGA GCAAGGCCGA GTGGTCTGTT CACGAGGTTA CCATCGAACT CTCTTCTTTC 400

CCAATCATGA CCTGCCCCCC GAGTTTAGCC CCCATCACGG CTGTGAAATC CACTTCGATA ATCCTAGCCT AGTGCTACTC 480

TTCAATAGTT GCTCCTGATG GGGCACTTTG GTCACATTGC CTTGGTTYCT CCTACCTCGT TCTCTTCCGC ATCAAGCCTC 560

TATGCCCGAC GACAACACCT CATTGGCCCG GACCACTTTG AGCGCGCACG CACCTTCGCG CCGAAGGAGT TGATAACACC 640

CTTCACCCTT GCCCAATGAT GGAGTTTTGG TCTATTTGTC ATGATCACCT CACATTCACT AGATCACGGA TCCTGGAAGA 720

GGGTGTGGAA GCCAGACCAG CTTGTCCCTG TTCTTGCAGA CTCAGGTCAG CTCCTAGCGG CTATCACAGC TCAGGATTAT 800

CAAGTCCCGT AAAGTCCAGA CCCTTTTCAT TGTATGATGC TGCCTAATTT GCGCTATCTC TATGCCGTAG CAGCCGTCTT 880

GGCTACAACT GGCTGCCATG GCTGAAGCAT CGTGAGATCT ATAAAGGTCT CCGAATCCTC GGTGAAGTCA GAATCGTCTC 960

TCCACACCAG TCAACAACAA GCTTCTTTCT CTTACAGCTT AGCCTGAGCA CATTCACAGA ACTCTTCCCT TCTTTTCGTC 1040

AATATGCTGT TCAAGTCATG GCAACTGGCA GCAGCCTCCG GGCTCCTGTC TGGAGTCCTC GGCATCCCGA TGGACACCGG 1120

CAGCCACCCC ATTGAGGCTG TTGATCCCGA AGTGAAGACT GAGGTCTTCG CTGACTCCCT CCTTGCTGCA GCAGGCGATG 1200

ACGACTGGGA GTCACCTCCA TACAACTTGC TTTACAGGTG AGACACCTGT CCCACCTGTT TTCCCTCGAT AACTAACTCT 1280

TATAGGAATG CCCTGCCAAT TCCACCTGTC AAGCAGCCCA AGATGTATGT CTTTGATTTT CTACGAAGCA ACTCGGCCCC 1360

GACTAATGTA TTCTAGGATC ATTACCAACC CTGTCACCGG CAAGGACATT TGGTACTATG AGATCGAGAT CAAGCCATTT 1440

CAGCAAAGGG TGAGTTTGCT CAGAAACCTT GTGGTAATTA ATCATTGTTA CTGACCCTTT CAGATTTACC CCACCTTGCG 1520

FIG._6A

CCCTGCCACT CTCGTCGGCT ACGATGGCAT GAGCCCTGGT CCTACTTTCA ATGTTCCCAG AGGAACAGAG ACTGTAGTTA 1600

GGTTCATCAA CAATGCCACC GTGGAGAACT CGGTCCATCT GCACGGCTCC CCATCGCGTG CCCCTTTCGA TGGTTGGGCT 1680

GAAGATGTGA CCTTCCCTGG CGAGTACAAG GATTACTACT TTCCCAACTA CCAATCCGCC CGCCTTCTGT GGTACCATGA 1760

CCACGCTTTC ATGAAGGTAT GCTACGAGCC TTTATCTTTC TTGGCTACCT TTGGCTAACC AACTTCCTTT CGTAGACTGC 1840

TGAGAATGCC TACTTTGGTC AGGCTGGCGC CTACATTATC AACGACGAGG CTGAGGATGC TCTCGGTCTT CCTAGTGGCT 1920

ATGGCGAGTT CGATATCCCT CTGATCCTGA CGGCCAAGTA CTATAACGCC GATGGTACCC TGCGTTCGAC CGAGGGTGAG 2000

GACCAGGACC TGTGGGGAGA TGTCATCCAT GTCAACGGAC AGCCATGGCC TTTCCTTAAC GTCCAGCCCC GCAAGTACCG 2080

TTTCCGATTC CTCAACGCTG CCGTGTCTCG TGCTTGGCTC CTCTACCTCG TCAGGACCAG CTCTCCCAAC GTCAGAATTC 2160

CTTTCCAAGT CATTGCCTCT GATGCTGGTC TCCTTCAAGC CCCCGTTCAG ACCTCTAACC TCTACCTTGC TGTTGCCGAG 2240

CGTTACGAGA TCATTATTGG TATGCCCTCC CCTCTCACGA ATGAGTCAAG AACTCTAAGA CTAACACTTG TAGACTTCAC 2320

CAACTTTGCT GGCCAGACTC TTGACCTGCG CAACGTTGCT GAGACCAACG ATGTCGGCGA CGAGGATGAG TACGCTCGCA 2400

CTCTCGAGGT GATGCGCTTC GTCGTCAGCT CTGGCACTGT TGAGGACAAC AGCCAGGTCC CCTCCACTCT CCGTGACGTT 2480

CCTTTCCCTC CTCACAAGGA AGGCCCCGCC GACAAGCACT TCAAGTTTGA ACGCAGCAAC GGACACTACC TGATCAACGA 2560

TGTTGGCTTT GCCGATGTCA ATGAGCGTGT CCTGGCCAAG CCCGAGCTCG GCACCGTTGA GGTCTGGGAG CTCGAGAACT 2640

CCTCTGGAGG CTGGAGCCAC CCCGTCCACA TTCACCTTGT TGACTTCAAG ATCCTCAAGC GAACTGGTGG TCGTGGCCAG 2720

GTCATGCCCT ACGAGTCTGC TGGTCTTAAG GATGTCGTCT GGTTGGGCAG GGGTGAGACC CTGACCATCG AGGCCCACTA 2800

CCAACCCTGG ACTGGAGCTT ACATGTGGCA CTGTCACAAC CTCATTCACG AGGATAACGA CATGATGGCT GTATTCAACG 2880

TCACCGCCAT GGAGGAGAAG GGATATCTTC AGGAGGACTT CGAGGACCCC ATGAACCCCA AGTGGCGCGC CGTTCCTTAC 2960

AACCGCAACG ACTTCCATGC TCGCGCTGGA AACTTCTCCG CCGAGTCCAT CACTGCCCGA GTGCAGGAGC TGGCCGAGCA 3040

FIG._6B

GGAGCCGTAC AACCGCCTCG ATGAGATCCT GGAGGATCTT GGAATCGAGG AGTAAACCCC GAGCCACAAG CTCTACAATC 3120

GTTTTGAGTC TTAAGACGAG GCTCTTGGTG CGTATTCTTT TCTTCCCTAC GGGGAACTCC GCTGTCCACT GCGATGTGAA 3200

GGACCATCAC AAAGCAACGT ATATATTGGA CTCACCACTG TCATTACCGC CCACTTGTAC CTATTCGATT CTTGTTCAAA 3280

CTTTTCTAGT GCGAGAGTGT CCATAGTCAA GAAACGCCCA TAGGGCTATC GTCTAAACTG AACTATTGTG TGGTCTGTGA 3360

CGTGGAGTAG ATGTCAATTG TGATGAGACA CAGTAAATAC GGTATATCTT TTCCTAGGAC TACAGGATCA GTTTCTCATG 3440

AGATTACATC CGTCTAATGT TTGTCCATGA GAGTYWAGCT AAGGTTGAGA ATGCATCAGA CGGAATCATT TGATGCTCTC 3520

AGCTCGTATT ACCGATGTAA GACAAGTTAG GTAAGTTGCT TGGTATCCGA AAATGACTCA GGCTCCCTCA TTAGGTTGCA 3600

TGTGAAAACC TTCAGCAACT CATGGGTGTT GGGACCAAAT CATCCATACC TGATTTTGAT AACTGACCTG GGTCAAT 3677

FIG._6C

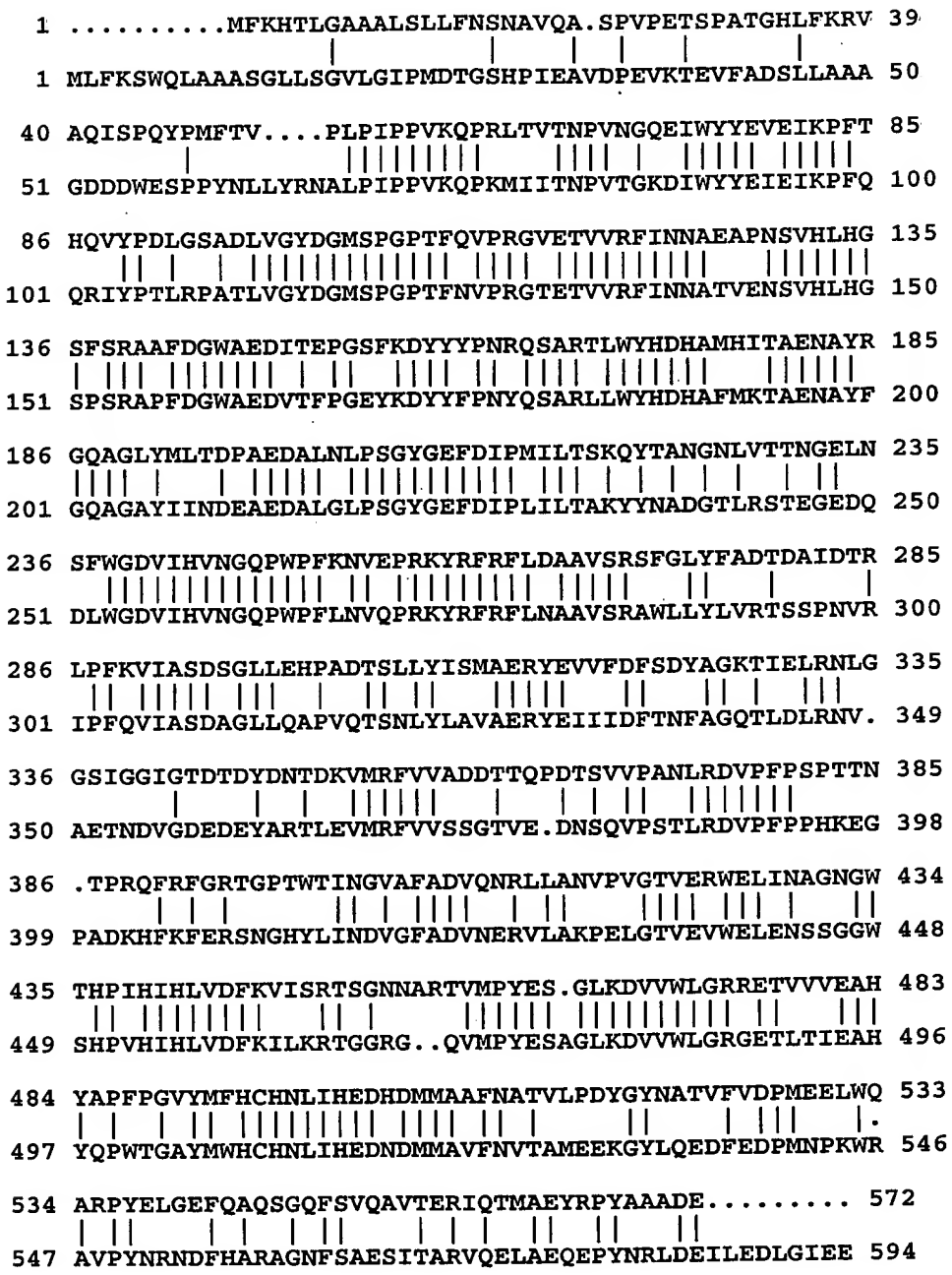
1 .....MFKHTLGAAALSLLFNSNAVQA.SPVPETSPATGHLFKRV 39
1 MLFKSWQLAAASGLLSGVLGIPMDTGSHPIEAVDPEVKTEVFADSLLAAA 50
40 AQISPQYPMFTV....PLPIPPVKQPRLTVTNPVNGQEIWYYEVEIKPFT 85
51 GDDDWESPPYNLLYRNALPIPPVKQPKMIITNPVTGKDIWYYEIEIKPFQ 100
86 HQVYPDLGSADLVGYDGMSPGPTFQVPRGVETVVRFINNAEAPNSVHLHG 135
101 QRIYPTLRPATLVGYDGMSPGPTFNVPRGTETVVRFINNATVENSVHLHG 150
136 SFSRAAFDGWAEDITEPGSFKDYYYPNRQSARTLWYHDHAMHITAENAYR 185
151 SPSRAPFDGWAEDVTFPGEYKDYYFPNYQSARLLWYHDHAFMKTAENAYF 200
186 GQAGLYMLTDPAEDALNLPSGYGEFDIPMILTSKQYTANGNLVTTNGELN 235
201 GQAGAYIINDEAEDALGLPSGYGEFDIPLILTAKYYNADGTLRSTEGEDQ 250
236 SFWGDVIHVNGQPWPFKNVEPRKYRFRFLDAAVSRSFGLYFADTDAIDTR 285
251 DLWGDVIHVNGQPWPFLNVQPRKYRFRFLNAAVSRAWLLYLVRTSSPNVR 300
286 LPFKVIASDSGLLEHPADTSLLYISMAERYEVVFDFSDYAGKTIELRNLG 335
301 IPFQVIASDAGLLQAPVQTSNLYLAVAERYEIIIDFTNFAGQTLDLRNV. 349
336 GSIGGIGTDTDYDNTDKVMRFVVADDTTQPDTSVVPANLRDVPFPSPTTN 385
350 AETNDVGDEDEYARTLEVMRFVVSSGTVE.DNSQVPSTLRDVPFPPHKEG 398
386 .TPRQFRFGRTGPTWTINGVAFADVQNRLLANVPVGTVERWELINAGNGW 434
399 PADKHFKFERSNGHYLINDVGFADVNERVLAKPELGTVEVWELENSSGGW 448
435 THPIHIHLVDFKVISRTSGNNARTVMPYES.GLKDVVWLGRRETVVVEAH 483
449 SHPVHIHLVDFKILKRTGGRG..QVMPYESAGLKDVVWLGRGETLTIEAH 496
484 YAPFPGVYMFHCHNLIHEDHDMMAAFNATVLPDYGYNATVFVDPMEELWQ 533
497 YQPWTGAYMWHCHNLIHEDNDMMAVFNVTAMEEKGYLQEDFEDPMNPKWR 546
534 ARPYELGEFQAQSGQFSVQAVTERIQTMAEYRPYAAADE..... 572
547 AVPYNRNDFHARAGNFSAESITARVQELAEQEPYNRLDEILEDLGIEE 594

FIG._7

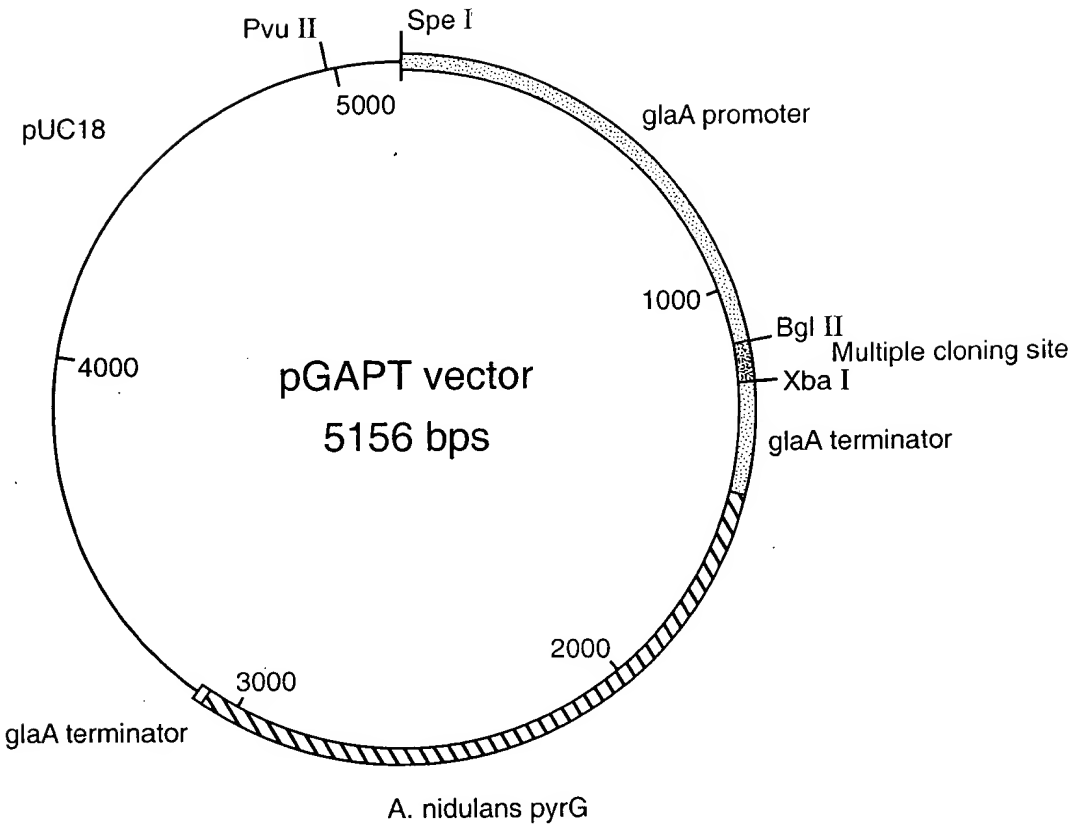
Pvu II
Spe I
5000
glaA promoter
pUC18
1000
Bgl II
Multiple cloning site
Xba I
4000
pGAPT vector
5156 bps
glaA terminator
2000
3000
glaA terminator
A. nidulans pyrG

FIG._8

```
AGATCTAATA TGCTGTTCAA GTCATGGCAA CTGGCAGCAG CCTCCGGGCT CCTGTCTGGA   60
GTCCTCGGCA TCCCGATGGA CACCGGCAGC CACCCCATTG AGGCTGTTGA TCCCGAAGTG  120
AAGACTGAGG TCTTCGCTGA CTCCCTCCTT GCTGCAGCAG GCGATGACGA CTGGGAGTCA  180
CCTCCATACA ACTTGCTTTA CAGGTGAGAC ACCTGTCCCA CCTGTTTTCC CTCGATAACT  240
AACTCTTATA GGAATGCCCT GCCAATTCCA CCTGTCAAGC AGCCCAAGAT GTATGTCTTT  300
GATTTTCTAC GAAGCAACTC GGCCCCGACT AATGTATTCT AGGATCATTA CCAACCCTGT  360
CACCGGCAAG GACATTTGGT ACTATGAGAT CGAGATCAAG CCATTTCAGC AAAGGGTGAG  420
TTTGCTCAGA AACCTTGTGG TAATTAATCA TTGTTACTGA CCCTTTCAGA TTTACCCCAC  480
CTTGCGCCCT GCCACTCTCG TCGGCTACGA TGGCATGAGC CCTGGTCCTA CTTTCAATGT  540
TCCCAGAGGA ACAGAGACTG TAGTTAGGTT CATCAACAAT GCCACCGTGG AGAACTCGGT  600
CCATCTGCAC GGCTCCCCAT CGCGTGCCCC TTTCGATGGT TGGGCTGAAG ATGTGACCTT  660
CCCTGGCGAG TACAAGGATT ACTACTTTCC CAACTACCAA TCCGCCCGCC TTCTGTGGTA  720
CCATGACCAC GCTTTCATGA AGGTATGCTA CGAGCCTTTA TCTTTCTTGG CTACCTTTGG  780
CTAACCAACT TCCTTTCGTA GACTGCTGAG AATGCCTACT TTGGTCAGGC TGGCGCCTAC  840
ATTATCAACG ACGAGGCTGA GGATGCTCTC GGTCTTCCTA GTGGCTATGG CGAGTTCGAT  900
ATCCCTCTGA TCCTGACGGC CAAGTACTAT AACGCCGATG GTACCCTGCG TTCGACCGAG  960
GGTGAGGACC AGGACCTGTG GGGAGATGTC ATCCATGTCA ACGGACAGCC ATGGCCTTTC 1020
CTTAACGTCC AGCCCCGCAA GTACCGTTTC CGATTCCTCA ACGCTGCCGT GTCTCGTGCT 1080
```

FIG._9A

```
TGGCTCCTCT ACCTCGTCAG GACCAGCTCT CCCAACGTCA GAATTCCTTT CCAAGTCATT   1140
GCCTCTGATG CTGGTCTCCT TCAAGCCCCC GTTCAGACCT CTAACCTCTA CCTTGCTGTT   1200
GCCGAGCGTT ACGAGATCAT TATTGGTATG CCCTCCCCTC TCACGAATGA GTCAAGAACT   1260
CTAAGACTAA CACTTGTAGA CTTCACCAAC TTTGCTGGCC AGACTCTTGA CCTGCGCAAC   1320
GTTGCTGAGA CCAACGATGT CGGCGACGAG GATGAGTACG CTCGCACTCT CGAGGTGATG   1380
CGCTTCGTCG TCAGCTCTGG CACTGTTGAG GACAACAGCC AGGTCCCCTC CACTCTCCGT   1440
GACGTTCCTT TCCCTCCTCA CAAGGAAGGC CCCGCCGACA AGCACTTCAA GTTTGAACGC   1500
AGCAACGGAC ACTACCTGAT CAACGATGTT GGCTTTGCCG ATGTCAATGA GCGTGTCCTG   1560
GCCAAGCCCG AGCTCGGCAC CGTTGAGGTC TGGGAGCTCG AGAACTCCTC TGGAGGCTGG   1620
AGCCACCCCG TCCACATTCA CCTTGTTGAC TTCAAGATCC TCAAGCGAAC TGGTGGTCGT   1680
GGCCAGGTCA TGCCCTACGA GTCTGCTGGT CTTAAGGATG TCGTCTGGTT GGGCAGGGGT   1740
GAGACCCTGA CCATCGAGGC CCACTACCAA CCCTGGACTG GAGCTTACAT GTGGCACTGT   1800
CACAACCTCA TTCACGAGGA TAACGACATG ATGGCTGTAT TCAACGTCAC CGCCATGGAG   1860
GAGAAGGGAT ATCTTCAGGA GGACTTCGAG GACCCCATGA ACCCCAAGTG GCGCGCCGTT   1920
CCTTACAACC GCAACGACTT CCATGCTCGC GCTGGAAACT TCTCCGCCGA GTCCATCACT   1980
GCCCGAGTGC AGGAGCTGGC CGAGCAGGAG CCGTACAACC GCCTCGATGA GATCCTGGAG   2040
GATCTTGGAA TCGAGGAGTA GTCTAGA                                       2067
```

FIG._9B

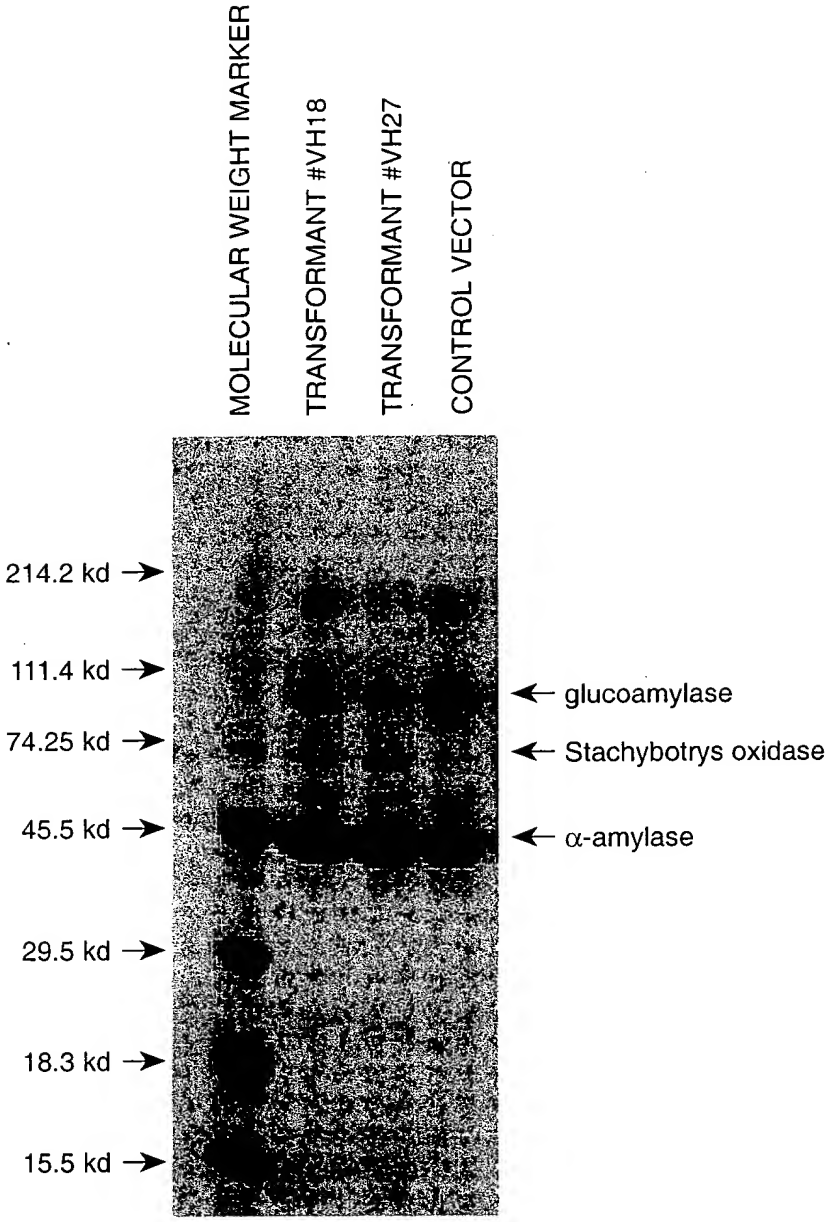

FIG._10